DOCUMENT RESUME

ED 326 325 PS 019 265

AUTHOR Wessel, Karen E.
TITLE A Program To Improve Fine Motor Development in Kindergarten Students.
PUB DATE Jan 88
NOTE 98p.; M.S. Practicum, Nova University.
PUB TYPE Dissertations/Theses - Practicum Papers (043)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS *Eye Hand Coordination; Kindergarten; Kindergarten Children; *Learning Activities; *Object Manipulation; Primary Education; Program Design; Program Effectiveness; Program Evaluation; Program Implementation; *Psychomotor Skills; *Student Improvement

ABSTRACT

A 10-week practicum intervention was designed to reduce deficiencies in 10 kindergarten children in southwest Florida with poor fine motor skills. The intervention consisted of daily instruction and weekly activity tests. Activities included drawing, tracing, cutting with scissors, pasting, molding with clay, various games, lacing, weaving, and handwriting. It was expected that at the end of the intervention, nearly all children in the target group would substantially improve in tracing, cutting and pasting, and manipulation and handwriting skills. Practicum evaluation data indicated that the intervention was successful. Appendices which comprise half the document provide: Cooperative Preschool Inventory-English/Spanish edition; teacher designed test of fine motor skills; individual instructional plan; activity tests (tracing skills, cut and paste, lacing, handwriting); weekly student checklist, screening posttest, etc. (RH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED326325

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

X Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

A PROGRAM TO IMPROVE FINE MOTOR DEVELOPMENT IN KINDERGARTEN STUDENTS

By

KAREN E. WESSEL

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Karen E. Wessel

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

A Practicum Report
submitted to the Faculty of the Center for the Advancement of Education of Nova University in partial fulfillment of the requirements for the degree of Master of Science.

The abstract of this report may be placed in the School Practices Information Files for reference.

January/1988

Running head: FINE MOTOR SKILLS

PS 016 325

Authorship Statement

I hereby testify that this paper and the work it reports are entirely my own. Where it has been necessary to draw from the work of others, published or unpublished, I have acknowledged such work in accordance with accepted scholarly and editorial practice. I give this testimony freely, out of respect for the scholarship of other workers in the field and in the hope that my own works, presented here, will earn similar respect.

Karen E. Wessel

Karen E. Wessel

Abstract

A Program to Improve Fine Motor Development in Kindergarten Students.
Wessel, Karen P. 1987: Practicum Report, Nova University, Center for the Advancement of Education.
Descriptors: Early Childhood Education/Kindergarten Students/Primary Education/Elementary Education/Fine Motor Development/Perceptual Motor Learning/Visual Motor Learning.

A practicum project was developed to provide a program to reduce deficiencies in kindergarten students with poor fine motor development.

The project was implemented over a ten week period to help students improve their fine motor skills and overall academic performance. The project consisted of daily instruction and weekly activity tests in order to strengthen the students' abilities in fine motor development. Intervention strategies were used to achieve objectives. End results of the objectives were assessed through the administration of a posttest of the Cooperative Preschool Inventory and a Teacher Designed Test. It was concluded that the results were positive, and the project can be recommended to other educators to enhance motor development of primary children.

Table of Contents

		Page
TITLE PAGE		i
AUTHORSHIP STATEMENT		ii
ABSTRACT		iii
TABLE OF CONTENTS		iv
OBSERVER'S VERIFICATION		vi
CHAPTER		
I.	PURPOSE	1
II.	RESEARCH AND SOLUTION STRATEGY	8
III.	METHOD	15
IV.	RESULTS	21
V.	RECOMMENDATION	23
REFERENCES		24
APPENDICES		
APPENDIX A:	Cooperative Preschool Inventory	26
APPENDIX B:	Teacher Designed Test of Fine Motor Skills	33
APPENDIX C:	Individual Instructional Plan	36
APPENDIX D:	Tracing Skills Activity Test	38
APPENDIX E:	Cut and Paste Activity Test	39
APPENDIX F:	Lacing Activity Test	41
APPENDIX G:	Handwriting Activity Test	42
APPENDIX H:	Handwriting Activity Test	43
APPENDIX I:	Weekly Student Checklist	44

Page

APPENDIX J: Fine Motor Screening Posttest 45

APPENDIX K: Teacher Designed Mastery Checklist 47

APPENDIX L: Cooperative Preschool Inventory Item Analysis 48

APPENDIX M: Teacher Designed Test Item 49

Chapter I

Purpose

To comprehend the purpose of this practicum, it is necessary to understand the relationship between the community and the school. The setting for this practicum was in an elementary school located in Southeast Florida. The school is located directly across the street from a major Air Force Base.

Presently, the school enrollment is predominantly military families of middle class socioeconomic status. The students bring with them diverse experiences they have gained living throughout the world.

The school has a total enrollment of 1,214 students--of the total membership 54 percent are White, 30 percent are Black, eight percent Asian and eight percent are Hispanic. Presently the school population, by grade level, is as follows: 201 kindergarteners, 188 first graders, 192 second graders, 181 third graders, 178 fourth graders, 140 fifth graders, and 134 sixth graders. The pupil-teacher ratio is 27 to one. This is an average figure for this school system. The range in ratio is from a low of 23 pupils per teacher to a high of 34; these figures fluctuate because of the transient military population.

The school staff has a total of 65 individuals.

This includes 61 full time staff members and four part-time members. The instructional staff is comprised of 45 classroom teachers, one compensatory education teacher, one librarian, 1.5 art teachers, two music teachers, 2.5 physical education teachers, five learning disabilities teachers, one speech therapist, and three Spanish teachers. Included also are one assistant principal, one principal intern, and one principal. The staff is composed of supporting personnel as well, five secretaries, one system aide, and three teacher aides, six custodians, and the cafeteria manager. Ten part-time workers are employed in the cafeteria.

The ethnic composition of the full time instructional staff is 64 percent White, 28 percent Black, and eight percent Hispanic.

The writer instructs a kindergarten class of 27 students. The responsibilities of the writer include oral and expressive language, reading readiness, math application and computation readiness, social sciences and handwriting skills. Also included are music, art, and physical education.

The writer began teaching five years ago as a fourth grade teacher in an inner city school for a large county school system. After three years the writer moved to another city and taught third grade at

a prestigious boys Catholic school. Today, this writer is presently teaching kindergarten for a major school system.

This writer is very concerned with the lack of development of fine motor skills in young children in this school. The majority of parents are busy with careers and not taking the time to develop fine motor skills such as tracing, cutting, lacing and handwriting. Today's kindergarten is also more demanding on the students, and expectations of students' progress and development are higher.

Fine motor skills and activities is an area of development many primary children have difficulties mastering. Many times primary children have not fully developed the skills required for fine motor activities. This is obvious in the way a child has difficulty in holding a pencil or crayon, tracing forms and letters, drawing and painting, using scissors and other manipulatives. It has been observed by this writer that many young children in the target school are not progressing at the rate expected of them due to the continuing changing of academic requirements for kindergarten students.

This problem existed for ten kindergarten students in the writer's classroom who are deficient in fine

motor development. These students had failed to develop the skills required to successfully complete kindergarten manipulative activities.

These students lack the ability to coordinate fine muscles for fine motor skills such as those required in eye-hand tasks, eye movement activities, and spatial and form perception activities. Kephart (1971) was concerned with children who do not possess perceptual motor abilities necessary for acquiring academic skills. Kephart (1971) pointed out, "The perceptual-motor theory of learning disabilities postulates that normal perceptual-motor development helps a child establish a solid and reliable concept of the world. A primary child's first learning are motor learnings muscular and motor responses." According to Kephart, "Learning difficulty may begin at this stage because a child's motor responses do not evolve into motor patterns."

The magnitude of the problem of these target students became even more apparent when scores on the Cooperative Preschool Inventory (CPI) (Appendix A) were examined. Most scores for fine motor development in these students were seen as deficient. To further substantiate an existing problem of difficulties in fine motor development among primary children in general, a teacher designed test was given (Appendix B).

The test results indicate that approximately 38 percent of the students in the target group were seen as deficient.

This practicum will focus on the ten students in the target group who are deficient in fine motor skills as revealed on the kindergarten diagnostic tests given by this writer (Appendices A and B).

Many educators consider the development of fine motor skills to be an important goal of the primary curriculum. Emphasis on development of fine motor skills suggest that children are well prepared for formal learning according to Miller and Brizzell (1983).

This practicum seeks to correct the fine motor development problems of kindergarten students in the target group, who performed poorly in fine motor skills and activities.

This writer had certain performances and conditions that she wished to achieve with the target group during the ten week period of implementation.

During this time, standards for fine motor achievement were set for the target students. The means by which outcomes and expected results are measured, as well as determined, were through performance and behavioral objectives.

The specific objectives that follow correlate with

the practicum problem, measure the projected outcome of improvement, and the attitude changes of the target group.

1. At the end of the ten week implementation period of fine motor activities, eight of the ten target students will improve by at least 75 percent in tracing skills. This will be measured by a pre and posttest (Appendix D) on these skills.

2. At the end of the ten week implementation period of fine motor activities, eight of the ten target students will demonstrate mastery of at least 75 percent in cutting and pasting skills. This will be measured by an activity test (Appendix E).

3. Over a period of ten weeks, eight of the ten target students involved in fine motor skills will improve by at least 75 percent in manipulative skills, such as lacing, weaving, and fine motor games. This will be measured by activity tests (Appendix E) given by this writer.

4. At the end of the ten week implementation period of fine motor skills, eight of the ten target students will improve handwriting skills (upper/lower case letters, first name, numbers 0-10). This will be measured by a pre and posttest (Appendices G and H) given by this writer.

These objectives helped the target students to improve fine motor skills and their overall academic ability as well as to improve overall development of a strong self concept.

Chapter II

Research and Solution Strategy

Fine motor development is one of the most difficult areas for a primary student to master. Motor skills are generally distinguished by the amount of muscular involvement required. According to Berger (1983), fine motor skills involve the small muscles of the body extremities and limited activities. Many other educators, as well, consider the development of fine motor skills to be an important goal of the preschool curriculum. One of the first and most influential of these educators was Maria Montessori. Montessori designed a series of puzzles, peg boards, and small motor tasks that encourage coordination between the eye, the hand, and the brain. Comparison studies, such as those done by Lerner (1981), suggest that programs which emphasize development of fine motor skills prepare children well for formal learning. Based on the research done, this writer feels that there are several factors that influence the difficulty some children experience with fine motor development. These include children who can't coordinate such fine muscles required in eye-hand tasks, eye movement tasks, and spatial and form perception tasks.

Joseph Oxendine's (1968) studies of research done

by Radler and Kephart (1960) indicate that motor skills are valuable in developing all-around school preparedness, not just readiness for physical education activities. They indicate that the kindergarten curriculum demands a level of readiness in the following areas of behavior: motor, symbolic, social, and numerical. These competencies assume a mastery of major and minor muscle movements, eye movements, eye-hand coordination, and a sense of laterality. In regard to fine motor behavior, the kindergarten child should be able to build with blocks and to draw simple forms such as squares and circles. Mastery of these are more closely related to school achievement than is the standard intelligence test score.

Newell's (1979) studies of Kephart's work on motor development found that he (Kephart) stresses the importance of perceptual motor orientation in the child as a foundation for the symbolic and conceptual activities of the classroom. He found that consistent and efficient motor patterns permit the child to explore his environment and systematize by comparing them with this motoric system. Kephart spent ten years gathering information for this study by observing in kindergarten classes.

According to Gearheart (1973), the test based on

Kephart's theory is the Purdue Perceptual Motor Survey developed by Dr. Eugene Roach and Dr. Kephart. Dr. Kephart considers visual-motor capabilities of prime importance in the development of learning skills predictors of the type of dysfunction which influences academic success. This survey consists of five parts:

1. Balance and posture
2. Body image and differentiation
3. Perceptual-motor match
4. Ocular control
5. Form perception.

Cruickshank's and Hallahan's (1975) studies of Chissom (1970), Upchurch (1972) and Kaufman and Kaufman (1972) all found significant relationships between motor performance involving gross-motor coordination, perceptual-motor ability, balance and academic aptitude and achievement.

Research on the part of Birch and Lefford (1967) and Lefford (1970) has demonstrated that skilled motor development is a reflection of sensory, perceptual, and intersensory processing and patterning of sensory inputs. Motor, especially visuomotor, tests continue to be among the best predictors of the type of dysfunction which influences academic success.

Studies by Rice (1972) of the effect of

sensorimotor approaches have generally demonstrated improvement in fine motor coordination, visual perception, and perceptual-motor performance.

Bannatyne's (1976) studies of Frostig (1970) found that she (Frostig) developed a program of sensorimotor skill development, emphasizing both gross and fine motor activity as well as direct visual perception development. Other studies by Bishop, Gayton and Bassett (1972) have supported the hypothesis that the Frostig program enhanced performance on perceptual development. Frostig eye-hand coordination exercises have proved useful since the teacher can invent and modify many similar tasks such as joining dots, tracing between lines, tracing pictures through paper, outlining line drawings in color, copying line pictures, cutting out patterns with scissors using stencils or creating rule designs.

Research done on the part of Lerner (1981) indicates immature motor development, laterality confusion, and poor awareness of his own body may reflect academic learning problems in children. Deficiencies and lags in basic motor development may lead to difficulties in other areas of learning. Lerner suggests that work in motor development and academic skills can be used to reinforce each other.

Lerner used several of these fine motor strategies during a summer camp and academic program and noted achievement in reading and motor ability.

After review of the research given, the writer used different methods suggested as possible solution strategies to improve the fine motor development of the target kindergarten students.

The writer discussed this problem of poor motor development with her colleagues, and it was concluded that these target students would benefit from a strong program of fine motor activities. During parent conferences, the writer discussed the course of action designed to improve development which would be a structured and consistent physical education program to strengthen fine motor development. Parents were informed that successful fine motor development would have the potential to enhance future school experiences.

The need for a planned intervention program was evident based on the results of the Cooperative Preschool Inventory (Appendix A) and a Teacher Designed Test (Appendix B), and the Individual Instructional Plan (IIP) (Appendix C). The writer used several strategies suggested by the study done by Radler and Kephart (1960). Their strategies emphasize the demands of readiness required for the kindergarten curriculum.

Radler and Kephart's program for the development of minor-muscle movements, eye-movements and eye hand coordination is composed of exercises designed to improve motor ability. Some exercises which were employed were drawing games and pegboard games. The writer felt that the students in the target group needed this type of active involvement in order to show growth.

This writer included strategies suggested by the studies done by Frostig (1970) and Lerner (1981). Frostig's strategy involves finger and hand control training. The Frostig hand-eye coordination exercises along with Lerner fine motor activities were used to develop motor skills. The following teaching strategies, such as tracing, outlining, lacing, cutting with scissors, were used to increase development in fine motor mastery.

A pretest and a posttest adapted from the Cooperative Preschool Inventory (Appendix A) and a Teacher Designed Test (Appendix B) were given to measure the mastery of the objectives presented. Activities were performed on a daily basis for approximately 20 minutes each day. Review of the solution strategies used by Radler and Kephart (1960), Frostig (1970) and Lerner (1981) were found to best fit the needs of students in this target group.

Chapter III

Method

Prior to the date of implementation, the writer considered the students' level of fine motor development as an important part of the implementation plan. Students who were seen as deficient in fine motor skills were preselected to be tested for a target group.

A meeting with colleagues was held to discuss the benefit from a strong program of fine motor activities.

A meeting with the principal, primary specialist and grade group chairperson was held to discuss a program of fine motor activities, testing plans, implementation plans and possible solution strategies.

Individual parent conferences were held to discuss the course of action designed to improve fine motor development as well as to improve overall future school experiences. The parents were informed of the results on the pretests given: The Cooperative Preschool Inventory (Appendix A) and a Teacher Designed Test (Appendix B).

The writer identified the target students who appeared to be deficient in fine motor development through the use of pretests.

The target group was given the Cooperative

Preschool Inventory (Appendix A), a Teacher Designed Test (Appendix B), and the Individual Instructional Plan (Appendix C). The target group was observed, monitored, and documented during the implementation period consisting of a ten week period of a strong program of fine motor activities.

The implementation of a program to improve fine motor development began on October 19, 1987. This practicum consisted of a ten week period of intervention strategies to improve fine motor skills in kindergarten students.

Ten of the writer's kindergarten class of 27 students were found to be in need of fine motor development, according to the results of the Cooperative Preschool Inventory (Appendix A) and the Teacher Designed Pretest (Appendix B).

The planned program was implemented for a period of ten weeks and was designed to improve the fine motor development in the target kindergarten students. During this time pre and posttesting, teacher directed motor activities and the assessing of students' progress was observed and recorded for the target group.

Sources for these activities presented included: Motoric Aids to Perceptual Training by Chaney and

Kephart (1968), Steps to Learning, A Handbook of Developmental Activities by Mank (1986), Learning Disabilities, Theories, Diagnosis and Teaching Strategies by Lerner (1981) and Psychology of Motor Learning by Oxendine (1968).

The schedule of the program was as follows:

Week One (October 19 - October 23) - The Cooperative Preschool Inventory (Appendix A) was reviewed and the Teacher Made Pretests (Appendix B) were given. Activities included chalkboard activities. Student's tasks included:

1. drawing from dot to dot
2. tracing over lines, straight, curved, angled
3. tracing repeated letters
4. tracing geometric forms
5. completing teacher designed tracing skills activity test (Appendix D).

Week Two (October 26 - October 30) - Activities emphasized tracing with pencil and paper. Student's tasks included:

1. tracing lines, straight, curved, angled
2. tracing directional arrows
3. tracing geometric forms
4. tracing letters, numbers
5. completing teacher designed tracing skills

activity test (Appendix D).

Week Three (November 2 - November 6) - Activities emphasized cutting with scissors. Student's tasks included:

1. cutting straight along dotted lines
2. cutting out marked geometric shapes
3. cutting out curving lines
4. cutting out pictures
5. completing teacher designed cutting, pasting activity test (Appendix E).

Week Four (November 9 - November 13) - Activities emphasized clay molding. Student's tasks included:

1. molding forms
2. molding letters
3. molding numbers
4. molding characters.

Week Five (November 16 - November 20) - Activities emphasized primary games. Student's tasks included:

1. pegboard games
2. hammer and nail games
3. jacks
4. clipping clothespins.

Week Six (November 23 - November 27) - Activities emphasized lacing. Student's tasks included:

1. lacing simple sewing cards

2. lacing detailed sewing cards

3. drawing pictures on burlap and lace designs

4. completing teacher designed lacing activity test (Appendix F).

Week Seven (November 30 - December 4) - Activities emphasized weaving. Student's tasks included:

1. weaving designs using premade weaving mats

2. cutting construction paper into mats, weaving designs.

Week Eight (December 7 - December 11) - Activities emphasized handwriting. Student's tasks included:

1. tracing upper case and lower case letters on unlined paper

2. tracing upper case and lower case letters on primary lined paper

3. writing first names

4. writing simple words

5. completing teacher designed handwriting activity test (Appendix G).

Week Nine (December 14 - December 18) - Activities emphasized handwriting. Student's tasks included:

1. tracing numbers 0-20 on unlined paper

2. tracing numbers 0-20 on lined primary paper

3. writing numbers 0-20 on lined primary paper

4. completing teacher designed handwriting

activity test (Appendix H).

Week Ten (January 4 - January 8) - Activities emphasized a review of the skills performed within the ten week period.

Monday - tracing and cutting

Tuesday - primary games

Wednesday - lacing

Thursday - handwriting letters, numbers

Friday - Posttest (Appendix B) modified form.

After the ten week implementation period, the target group was retested with the Teacher Designed Test (Appendix B) to determine progress in the area of fine motor development. The students' development was documented using a Fine Motor Skills Screening Posttest (Appendix J) and the Fine Motor Skills Mastery Checklist (Appendix K).

Chapter IV

Results

During the ten week implementation period, the target group of ten students' progress in motor development was measured using pretests, student activity tests, and student checklists.

Students were evaluated on improvement of test results on the Cooperative Preschool Inventory (Appendix A). Pretest results ranged between 25 to 50 percent mastery of fine motor skills. Posttest results ranged between 75 to 100 percent mastery of fine motor skills (Appendix L). This shows an improvement of at least 25 percent for each student.

Students were also evaluated on improvement of test results on the Teacher Designed Test (Appendix B). Pretest results ranged between 31 percent mastery to 68 percent mastery of skills. Posttest results on the Teacher Designed Test ranged from 68 percent to 100 percent mastery of fine motor skills (Appendix M). This shows an improvement of at least 32 percent for each student. The target students' scores showed them to be in the average to above average developmental stages.

The following outcome objectives were achieved by the end of the ten week implementation period:

1. At the end of the ten week implementation period of fine motor activities, eight of the ten target students improved by at least 75 percent in tracing skills. This was measured by a pre and posttest (Appendix D) on these skills.

2. At the end of the ten week implementation period of fine motor activities, eight of the ten target students demonstrated mastery of at least 75 percent in cutting and pasting skills. This was measured by an activity test (Appendix E).

3. Over a period of ten weeks, eight of the ten target students involved in the fine motor skills improved by at least 75 percent in manipulative skills, such as lacing, weaving, and fine motor games. This was measured by activity tests (Appendix E) given by this writer.

4. At the end of the ten week implementation period of fine motor skills, eight of the ten target students improved handwriting skills (upper/lower case letters, first name, numbers 0-20). This was measured by a pre and posttest (Appendices G and H) given by this writer.

This practicum displayed substantial improvement in students' fine motor development as well as overall work performance.

Chapter V

Recommendation

Improving students' fine motor development in the classroom has been shown to help children prepare for formal learning. The plan proposed in this practicum provides a setting which enhances muscular involvement required to master fine motor skills. When a structured intervention program of fine motor skills is present, more overall academic skill is measured and an increase in student self confidence and image emerges.

The use of this practicum will be recommended to the kindergarten teachers of the target school as well as the other primary grade instructors. It will be recommended that the plan be used throughout the school year.

This practicum will be submitted to the administration and the faculty council at the target school for consideration for being made into a handbook for future use in the primary grades.

The writer will also submit this practicum to graduate students enrolled in the Early Childhood Module at Nova University's Miami site.

References

Bannatyne, Alexander. (1976). Language, Reading and Learning Disabilities. Illinois: Charles C. Thomas Publishers.

Berger, Kathleen Stasser. (1986). The Developing Person Through Childhood and Adolescence. New York: Worth Publishers, Inc.

Chaney, Clara M., and Kephart, Newell C. (1968). Motoric Aids to Perceptual Training. Ohio: Charles I. Merrill Publishing Company.

Cruickshank, William H., and Hallahan, Daniel P. (1975). Perceptual and Learning Disabilities in Children, Volume 2, Research and Theory. New York: Syracuse University Press.

Gearheart, B.R. (1973). Learning Disabilities Educational Strategies. Saint Louis: C.V. Mooby Company.

Lerner, Janet W. (1981). Learning Disabilities Theories, Diagnosis, and Teaching Strategies. Boston: Houghton Mifflin Company.

Mank, Mary. (1985). Steps to Learning, A Handbook of Developmental Activities. Palo Alto, Calif.: R & H Publishers.

Newell, J. (1979). Perceptual-Motor Learning Action and Thoughts. New Jersey: Prentice-Hall, Inc.

Oxendine, Joseph B. (1968). Psychology of Motor Learning. New York: Appleton-Century-Crofts.

COOPERATIVE PRESCHOOL INVENTORY

by Dr. Bettye M. Caldwell

ENGLISH/SPANISH EDITION

SCORE
R
W
DK

SPECIFIC DIRECTIONS FOR ADMINISTERING WILL BE FOUND IN THE PRESCHOOL INVENTORY MANUAL.

Name _____ Boy ☐ Girl ☐
LAST FIRST

	YEAR	MONTH	DAY	
Date of test	_____	_____	_____	Time finished _____
Birthdate	_____	_____	_____	Time started _____
Age	_____	_____	_____	Total time _____

School attended _____ How long? _____

Name of teacher _____ Name of examiner _____

Child's major language _____ Language in which given _____

REPRODUCED UNDER LICENSE

Copyright © 1974 by Educational Testing Service. All rights reserved.

Translated from *Cooperative Preschool Inventory* by Dr. Bettye M. Caldwell.
Copyright © 1967, 1968, 1970 by Educational Testing Service. All rights reserved.

Published by ADDISON-WESLEY PUBLISHING COMPANY · Menlo Park, California · Reading, Massachusetts · London · Don Mills, Ontario

1. ¿Cómo te llamas?
   WHAT IS YOUR FIRST NAME? R W DK
2. ¿Cuántos años tienes?
   HOW OLD ARE YOU? R W DK
3. ¿Cuál es tu apellido?
   WHAT IS YOUR LAST NAME? R W DK
4. Enséñame tu hombro.
   SHOW ME YOUR SHOULDER. R W DK
5. Enséñame tu tacón.
   SHOW ME YOUR HEEL. R W DK
6. ¿Qué es esto? (Finger) R W DK
   WHAT'S THIS? (Finger) R W DK
7. ¿Qué es esto? (Knee)
   WHAT'S THIS? (Knee) R W DK
8. ¿Qué es esto? (Elbow)
   WHAT'S THIS? (Elbow) R W DK
9. Levanta la mano.
   RAISE YOUR HAND. R W DK
10. Ahora, brinca.
    NOW JUMP. R W DK
11. Di "hola" (pause before continuing) —en voz alta.
    SAY "HELLO" VERY LOUDLY. R W DK
12. Menéate.
    WIGGLE. R W DK
13. Pon tres carros dentro de la caja grande.
    PUT THREE CARS IN THE BIG BOX. R W DK
14. Pon el carro rojo (colorado) encima de la caja negra.
    PUT THE RED CAR ON THE BLACK BOX. R W DK
15. Pon el carro amarillo encima de la caja chiquita.
    PUT THE YELLOW CAR ON THE LITTLE BOX. R W DK
16. Pon el carro azul debajo de la caja verde.
    PUT THE BLUE CAR UNDER THE GREEN BOX. R W DK
17. Pon dos carros detrás de la caja que está en el medio.
    PUT TWO CARS BEHIND THE BOX IN THE MIDDLE. R W
18. Dámelo todo.
    GIVE EVERYTHING TO ME. R W
19. Si estás enfermo, ¿a quién vas a ver?
    IF YOU WERE SICK WHO WOULD YOU GO TO? R W
20. Si quieres ver un barco, ¿adónde vas?
    IF YOU WANTED TO FIND A BOAT, WHERE WOULD YOU LOOK? R W I
21. Si quieres comprar gasolina, ¿adónde vas?
    IF YOU WANTED TO BUY SOME GAS WHERE WOULD YOU GO R W I
22. ¿Cuándo comemos el desayuno? (In the Southwest: ¿Cuándo comemos el almuerzo?)
    WHEN DO WE EAT BREAKFAST R W I
23. Si quieres leer algo, ¿qué haces?
    IF YOU WANTED TO READ SOMETHING, WHAT WOULD YOU DO? R W I
24. Si quieres hallar (encontrar) un león, ¿dónde lo buscas?
    IF YOU WANTED TO FIND A LION WHERE WOULD YOU LOOK? R W I
25. ¿Qué hace una mamá?
    WHAT DOES A MOTHER DO? R W D
26. ¿Qué hace un dentista?
    WHAT DOES A DENTIST DO? R W D
27. ¿Qué hace una maestra?
    WHAT DOES A TEACHER DO? R W D
28. ¿En qué dirección se mueve el agua de una catarata (cascada)?
    WHICH WAY DOES A WATERFALL GO? R W D
29. ¿Cómo se mueve un disco en el tocadiscos (stereo)?
    WHICH WAY DOES A PHONOGRAPH RECORD GO? R W D

FILMED FROM BEST COPY AVAILABLE

30. ¿En qué dirección se mueve la estrella en la feria (la rueda de la fortuna en la feria)?
WHICH WAY DOES A FERRIS WHEEL GO? R W DK

31. ¿Cuántos ojos tienes?
HOW MANY EYES DO YOU HAVE? R W DK

32. Déjame oirte contar en voz alta.
LET'S HEAR YOU COUNT OUT LOUD. R W DK

33. ¿Cuántas manos tienes?
HOW MANY HANDS DO YOU HAVE? R W DK

34. ¿Cuántas ruedas tiene una bicicleta?
HOW MANY WHEELS DOES A BICYCLE HAVE? R W DK

35. ¿Cuántas gomas (llantas) tiene un carro?
HOW MANY WHEELS DOES A CAR HAVE? R W DK

36. ¿Cuántas ruedas tiene un triciclo (velocípedo)?
HOW MANY WHEELS DOES A TRICYCLE HAVE? R W DK

37. Hold up the blank piece of paper.
¿Cuántas esquinas tiene esta hoja de papel?
Let child count if he can and needs to.
Hold up the blank piece of paper. Say, "HOW MANY CORNERS DOES THIS SHEET OF PAPER HAVE?" R W DK

38. ¿Cuántos dedos tienes en los pies?
HOW MANY TOES DO YOU HAVE? R W DK

39. ¿Cuál es más grande, un árbol o una flor?
WHICH IS BIGGER, A TREE OR A FLOWER? R W DK

40. ¿Cuál es más despacio, un carro o una bicicleta?
WHICH IS SLOWER, A CAR OR A BICYCLE? R W DK

41. ¿Cuál es más pesado, un ladrillo o un zapato?
WHICH IS HEAVIER, A BRICK OR A SHOE? R W DK

42. Pon el dedo en la que está en el medio.
POINT TO THE MIDDLE ONE. R W DK

43. Pon el dedo en la primera.
POINT TO THE FIRST ONE. R W DK

44. Pon el dedo en la última.
POINT TO THE LAST ONE. R W DK

45. Pon el dedo en la segunda.
POINT TO THE SECOND ONE. R W DK

46. ¿Cuál de estos dos grupos tiene más fichas?
WHICH OF THESE TWO GROUPS HAS MORE CHECKERS IN IT? (2 & 8) R W DK

47. ¿Cuál de estos dos grupos tiene menos fichas?
WHICH OF THESE TWO GROUPS HAS LESS CHECKERS IN IT? (4 & 6) R W DK

48. ¿Cuál de estos dos grupos tiene más fichas?
WHICH HAS MORE CHECKERS IN IT? (5 & 5) R W DK

49. Pon el dedo en el que más se parece a una rueda.
POINT TO THE ONE THAT IS MOST LIKE A WHEEL. R W DK

50. Pon el dedo en el que más se parece a un palo.
POINT TO THE ONE THAT IS MOST LIKE A STICK. R W DK

51. Pon el dedo en el que más se parece a una carpa (tienda de campaña).
POINT TO THE ONE THAT IS MOST LIKE A TENT. R W DK

52. Haz uno como éste. Haz el tuyo aquí.
MAKE ONE LIKE THIS. MAKE YOURS HERE. (Line) R W DK

53. Ahora uno como éste.
NOW ONE LIKE THIS. (Circle) R W DK

54. Y ahora haz uno como este otro.
AND NOW THIS ONE. (Square) R W DK

55. Haz uno como éste.
MAKE ONE LIKE THIS. (Triangle) R W DK

56. ¿De qué color es esto?
WHAT COLOR IS THIS? R W DK

57. ¿De qué color es esto?
WHAT COLOR IS THIS? R W DK

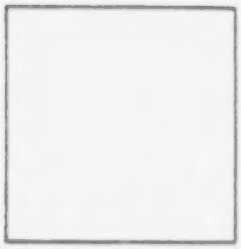
58. ¿Cuál es como el color de la noche?
WHICH ONE IS THE COLOR OF NIGHT? R W DK

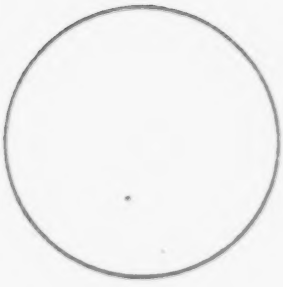
59-60. Pinta el círculo de amarillo.
COLOR THE CIRCLE YELLOW. (59) (60) R W DK

61-62. Pinta el cuadro de violeta (morado).
COLOR THE SQUARE PURPLE. (61) (62) R W DK

63-64. Pinta el triángulo de anaranjado (el color de una naranja, el color de una china).
COLOR THE TRIANGLE ORANGE. (63) (64) R W DK

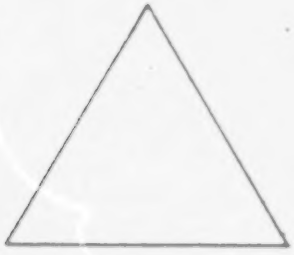
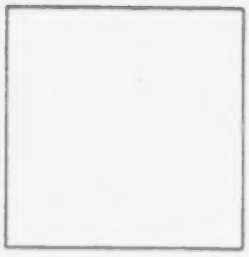
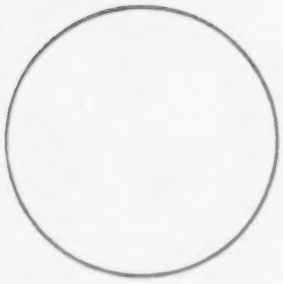
CONTINUE ☞



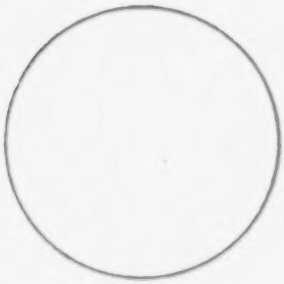
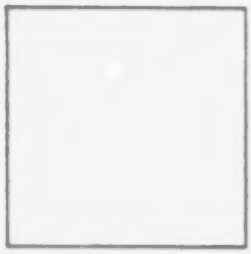


CONTINUE

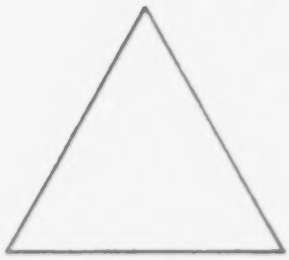
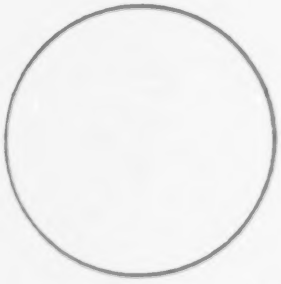
59-60. (círculo amarillo
(
(CIRCLE YELLOW
(59) (60)

61-62. (cuadro violeta
(
(SQUARE PURPLE
(61) (62)

63-64. (triángulo anaranjado
(
(TRIANGLE ORANGE
(63) (64)

COOPERATIVE PRESCHOOL INVENTORY ITEM ANALYSIS

Name: _____ Date: _____

LANGUAGE DEVELOPMENT

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

5 / 8 | / 8

GROSS MOTOR DEVELOPMENT

9. _____
10. _____
11. _____
12. _____

2 / 4 | / 4

VISUAL PERCEPTION DEVELOPMENT

13. _____
14. _____
15. _____
16. _____
17. _____
28. _____
29. _____
30. _____
56. _____
57. _____
58. _____

6 / 11 | / 11

AUDITORY PERCEPTION DEVELOPMENT

18. _____
59. _____
60. _____
61. _____
62. _____
63. _____
64. _____

4 / 7 | / 7

LANGUAGE ARTS COGNITIVE DEVELOPMENT

19. _____
20. _____
21. _____
22. _____
23. _____
24. _____

4 / 6 | / 6

EXPERIENTIAL DEVELOPMENT

25. _____
26. _____
27. _____

2 / 3 | / 3

MATH PERCEPTUAL DEVELOPMENT

31. _____
32. _____
33. _____
34. _____
35. _____
36. _____
37. _____
38. _____

5 / 8 | / 8

MATH CONCEPTS DEVELOPMENT

39. _____
40. _____
41. _____
42. _____
43. _____
44. _____
45. _____
49. _____
50. _____
51. _____

6 / 10 | / 10

MATH COGNITIVE DEVELOPMENT

46. _____
47. _____
48. _____

2 / 3 | / 3

FINE MOTOR DEVELOPMENT

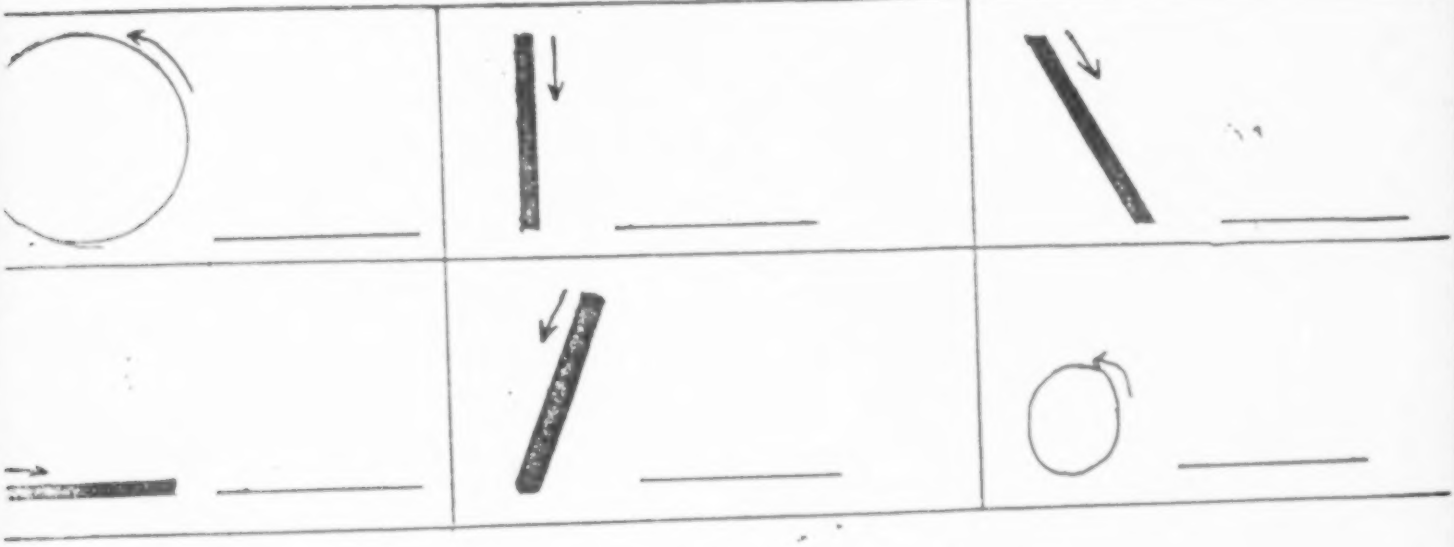
52. _____
53. _____
54. _____
55. _____

2 / 4 | / 4

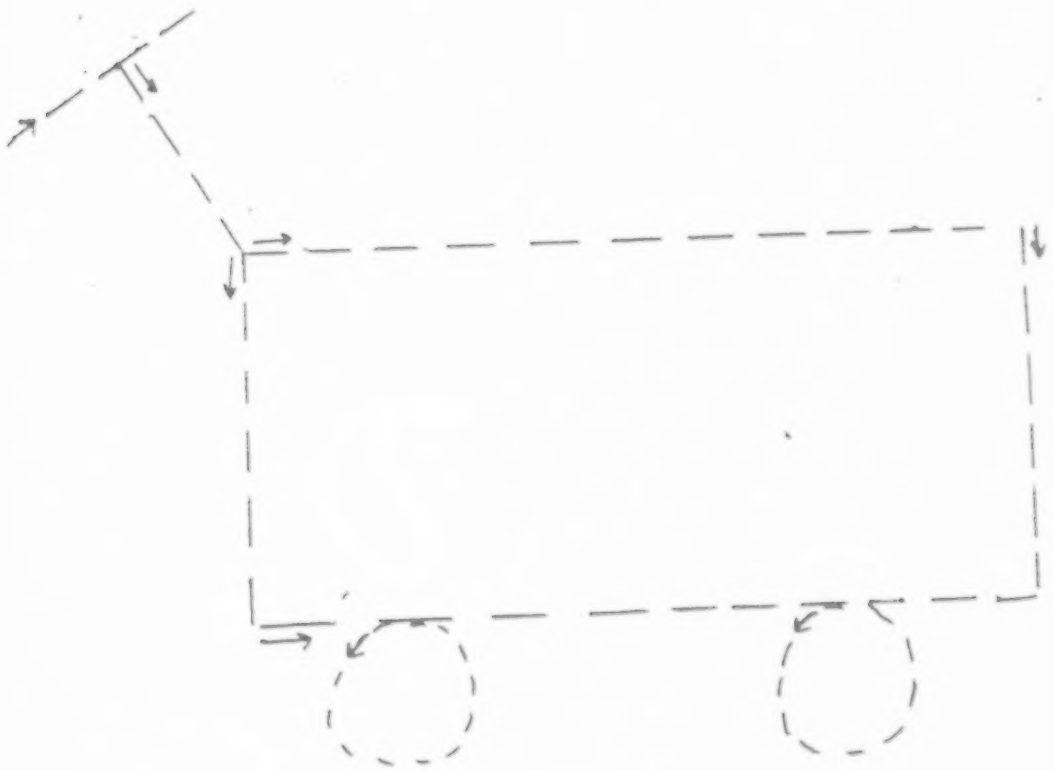
HIS-13451 (08-85)

DADE COUNTY PUBLIC SCHOOLS

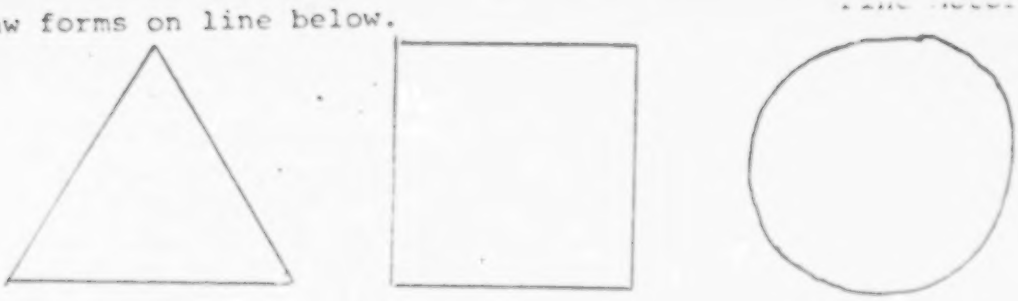
I. Copy lines in the direction of the arrows.



II. Trace along dotted lines in the direction of the arrows.



III. Draw forms on line below.



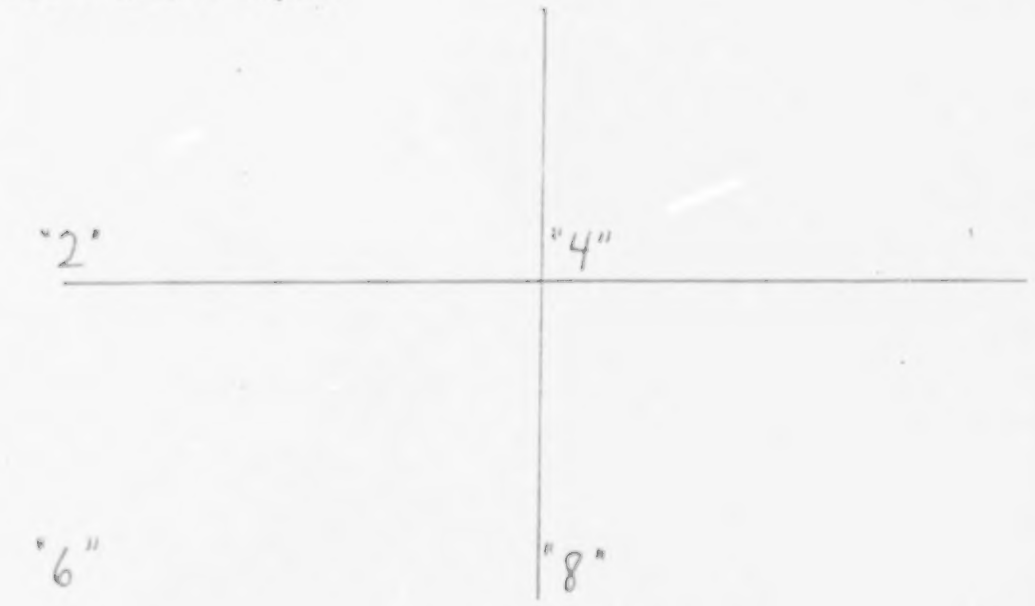
IV. Write first name.

V. Write letter forms.

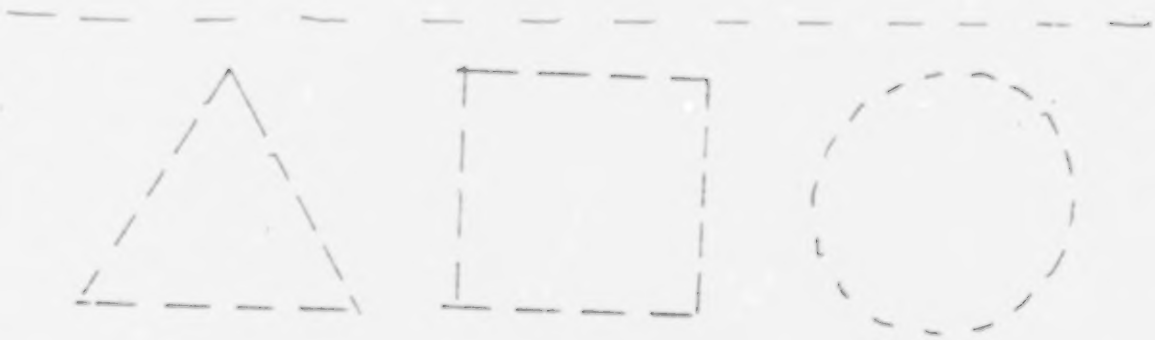
"s" "n"

"d" "e"

VI. Write number forms.



VII. Cut shapes along dotted lines, match and paste forms.



DADE COUNTY PUBLIC SCHOOLS

INDIVIDUAL INSTRUCTIONAL PLAN (IIP): PREVENTATIVE STRATEGIES
KINDERGARTEN LANGUAGE ARTS

NAME _____ TEACHER _____ DATE INITIATED _____

LEARNING PROBLEM	REVISED CURR. OBJ.	INSTRUCTIONAL OBJECTIVES The student will:	Starting Date	Completion Date*
MOTOR DEVELOPMENT	1 2	A - participate in gross motor activities (marching, skipping, jumping, etc.) B - participate in fine motor activities: - tracing - templates - pegboards - fingerpainting - modeling clay - cutting exercises - placing and pasting - fingerplays - sewing cards		
EXPERIENTIAL BACKGROUND	7 8 9	A - participate in vicarious experiences (films, filmstrips, listen to stories) B - participate in direct experiences (field trips, experiments, etc.) C - interact with classroom guests from community (e.g., artists, police, fire-fighters, doctors, dentists, politicians, etc.)		
AUDITORY PERCEPTION	10 11 12 14	A - differentiate gross unrelated sounds B - differentiate finer sounds (same/different) C - listen to stories and identify specific words or concepts in the story D - listen to and identify rhyming words		
VISUAL PERCEPTION	16 16 15 16 17	A - match/identify similar pictures, shapes, designs, objects, colors, sizes B - complete puzzles C - identify spatial relationships (top/bottom, first/last, etc.) D - copy designs (e.g., blocks, pegboards, beads, parquetry, etc.) E - identify/match letter forms (upper-case, lower-case),		
LANGUAGE DEVELOPMENT	24 23 25 22 20	A - participate in Language Experience Activities B - expand speaking vocabulary C - orally interpret pictures, spatial relationships, games, situations, etc. D - associate pictures with materials read orally E - follow oral directions		
COGNITIVE DEVELOPMENT	33 31 34 32 29 35	A - observe series of related objects/pictures and organize into logical sequence of events B - identify and organize similar objects based on common properties C - listen to story and retell in sequential order D - listen to story and respond verbally to questions E - pantomime story F - listen to story and make up a different ending G - participate in recall/memorization activities		

*Projected date of changing program

INDIVIDUAL INSTRUCTIONAL PLAN (IIP): PREVENTATIVE STRATEGIES
KINDERGARTEN MATHEMATICS

ME _____ TEACHER _____ DATE INITIATED _____

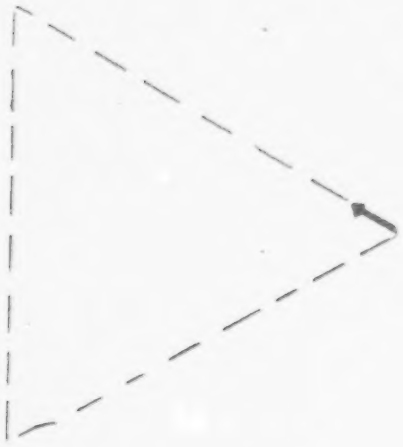
LEARNING PROBLEM	REVISED CURR. OBJ.	INSTRUCTIONAL OBJECTIVES The student will:	STARTING DATE	COMPLETION DATE*
CONCEPT DEVELOPMENT	1	A - identify/name objects which are circles, squares, triangles		
	2	B - identify objects having same or different shape, size		
	3	C - indicate the positions: over, under, up, down, bottom, top, between, in the middle of, on, off, next to, besides, around, in front of, behind, in back of, to the right of, to the left of, inside, outside		
	4	D - identify objects that are longer, shorter, taller		
	5	E - identify objects whose areas are larger, smaller		
	6	F - identify objects that are lighter, heavier		
	7	G - identify objects whose capacity is empty, full, more, less		
	18	H - identify positional order of concrete objects: first, last, before, after		
PERCEPTUAL DEVELOPMENT	8	A - sort objects by color, shape, size to form sets		
	9	B - match sets one-to-one using concrete objects		
	12	C - count orally, 1-5		
	12	D - count concrete objects, 1-5		
	13	E - read numerals, 0-5		
	13	F - match numerals to sets of concrete objects, 0-5		
	16, 17	G - identify/count pennies and indicate the value, ≥ 5		
	24	H - complete patterns by color using concrete objects.		
COGNITIVE DEVELOPMENT	10	A - compare sets (equal, not equal) using concrete objects		
	11	B - compare sets (more, less) using concrete objects		
	22	C - add, using concrete objects, to join sets and verbalize the statement ≥ 5		
	23	D - subtract using concrete objects to separate sets and verbalize the statement ≥ 5		

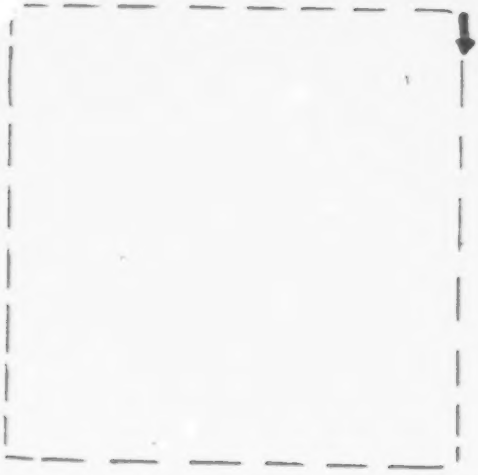
* Projected date of changing program

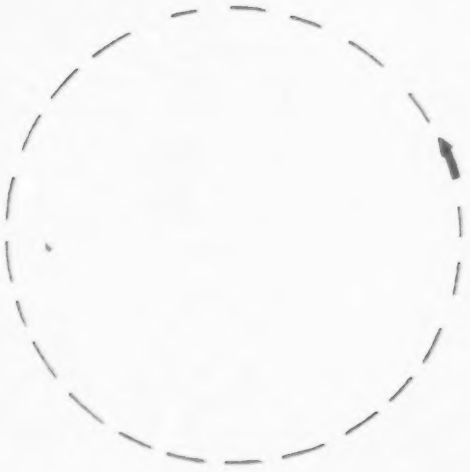
MIB-13452 (08-85)

APPENDIX D

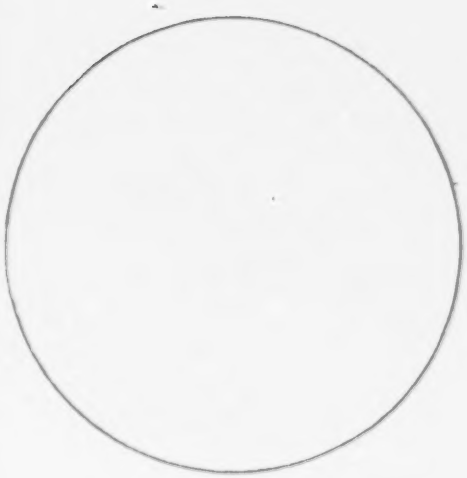
Tracing Skills Activity Test

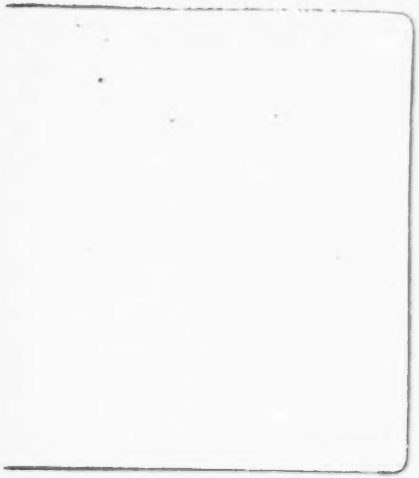


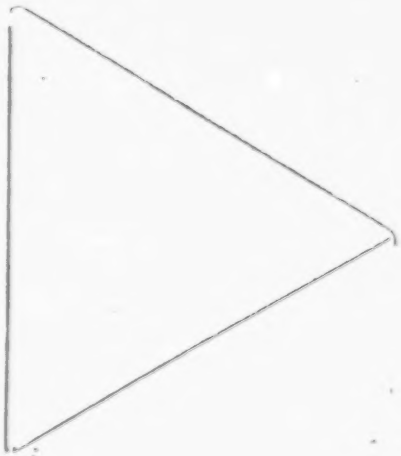


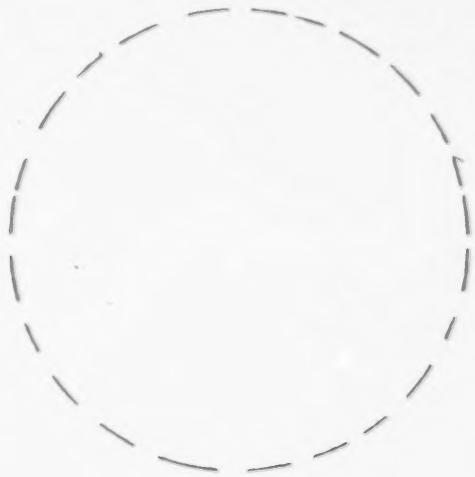


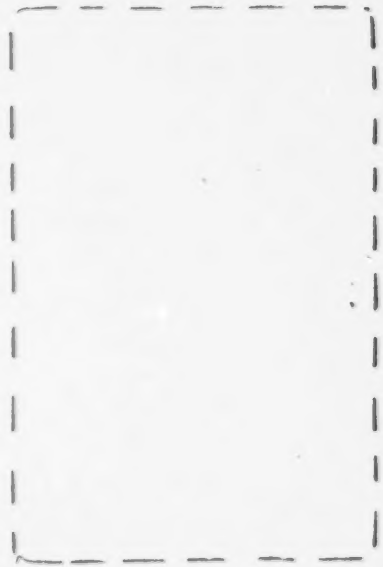
Cut and Paste Activity Test

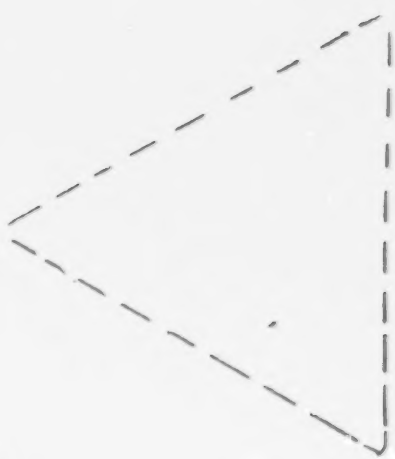






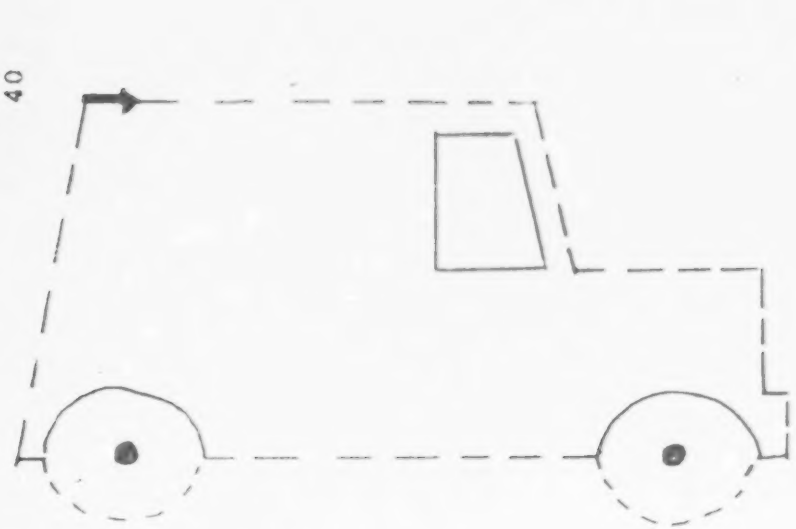


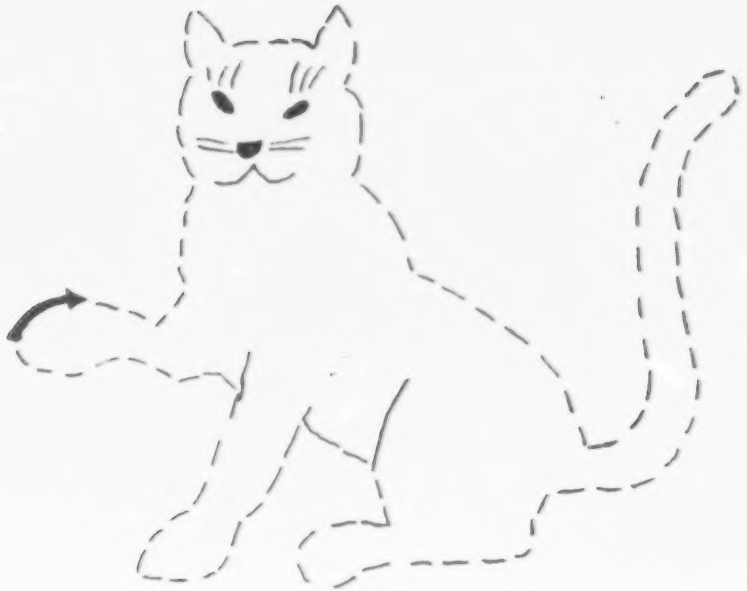


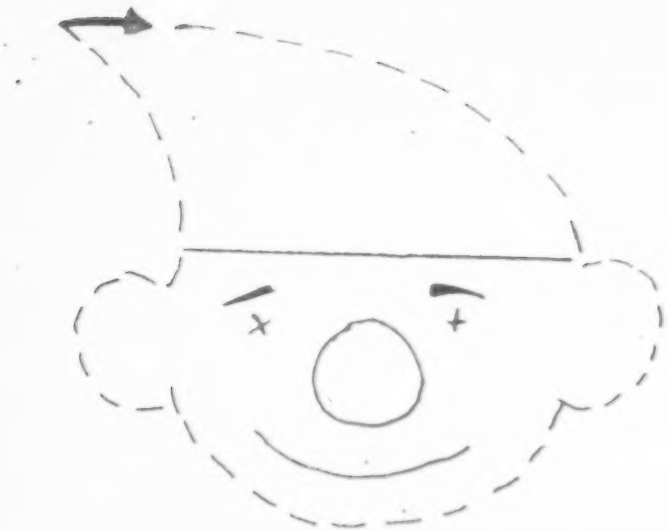


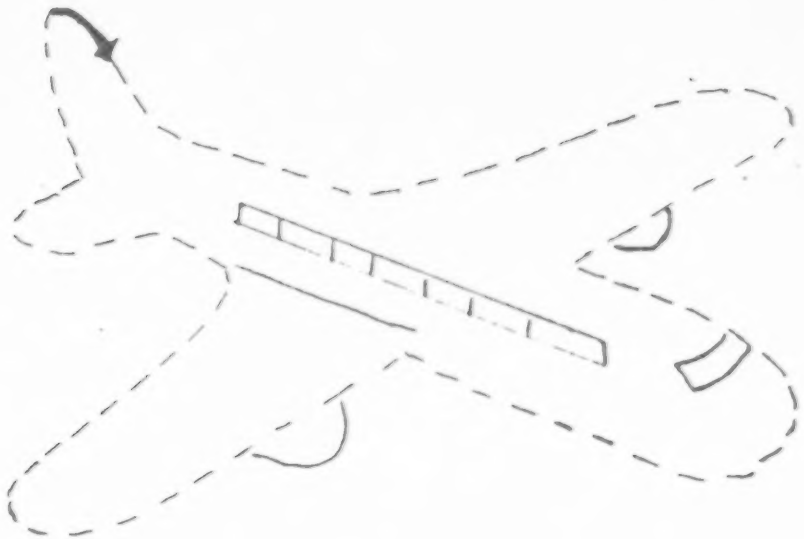
46

47



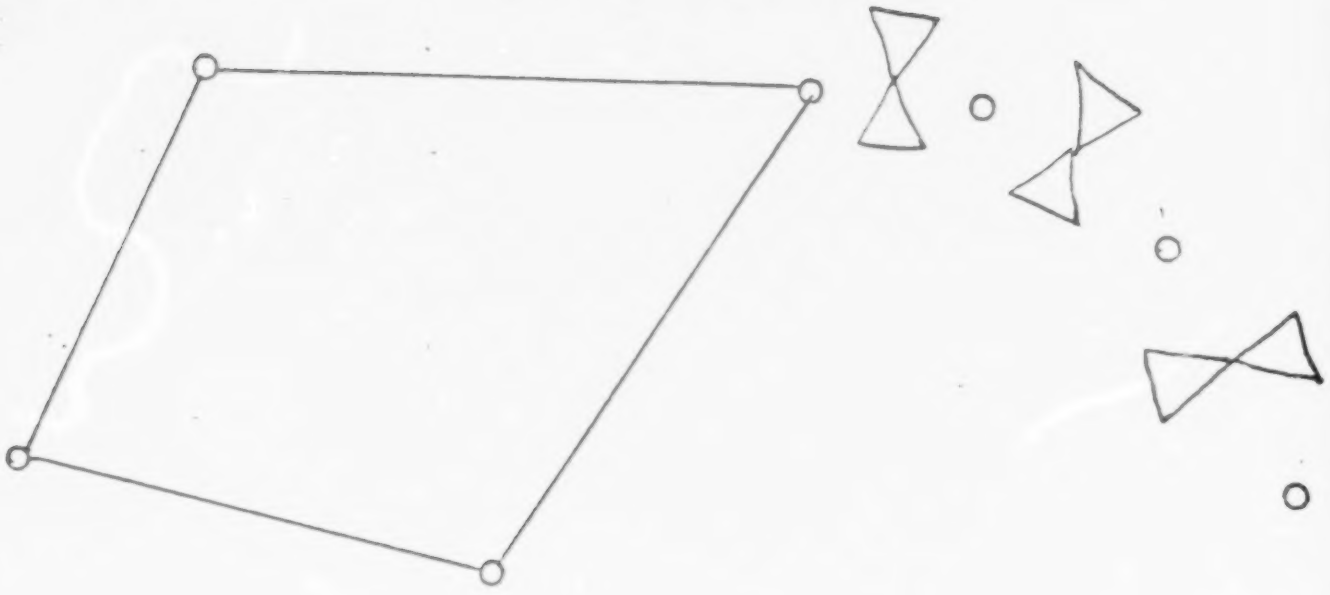


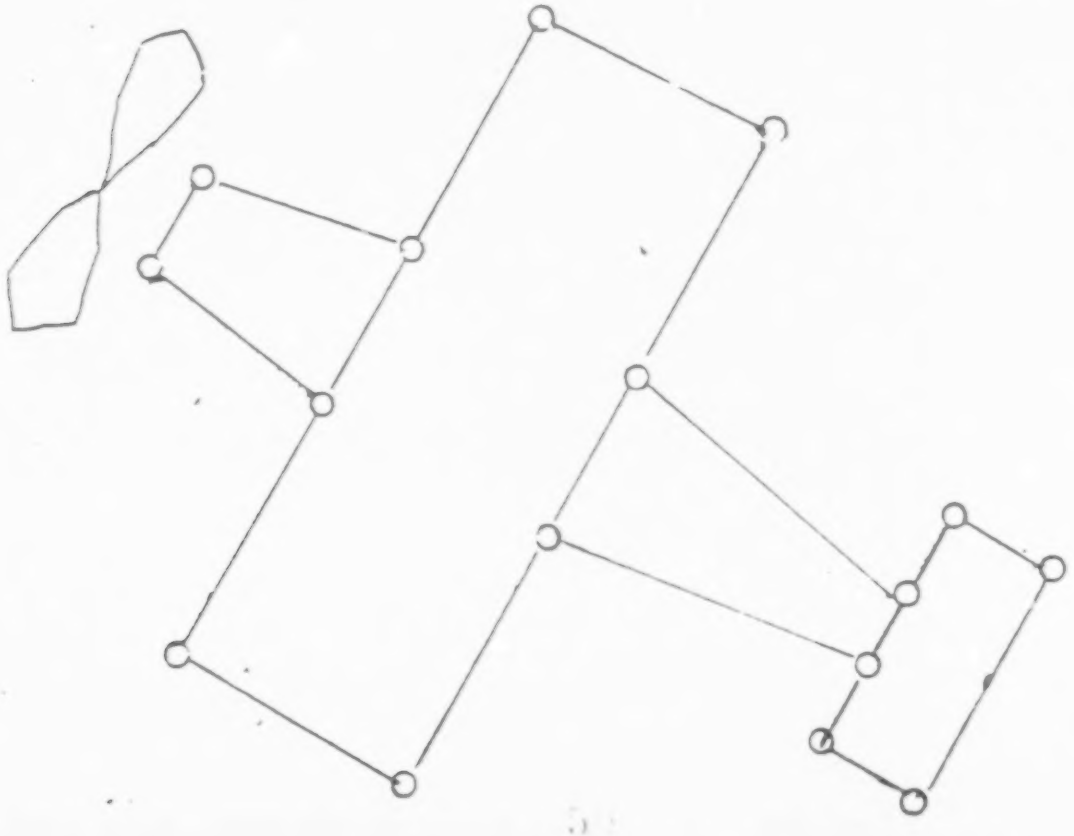


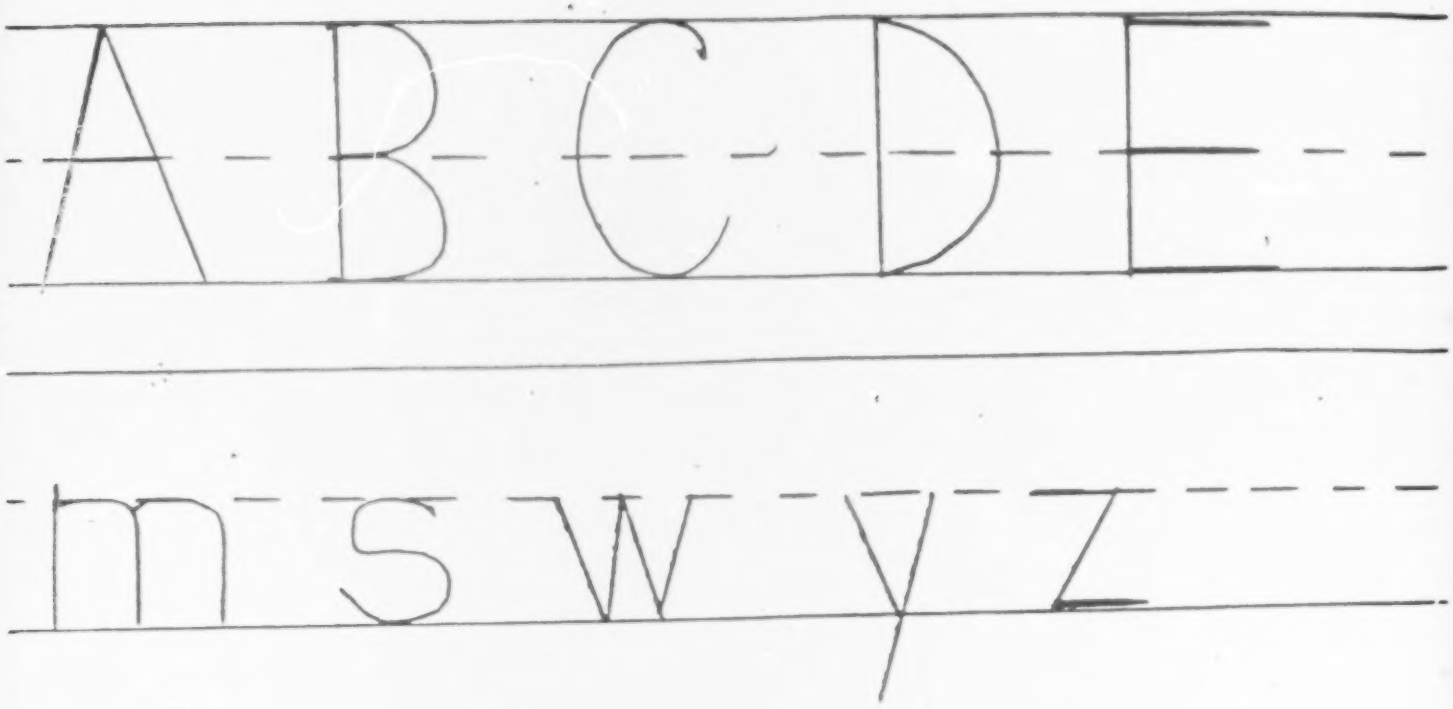


APPENDIX F

Lacing Activity Test





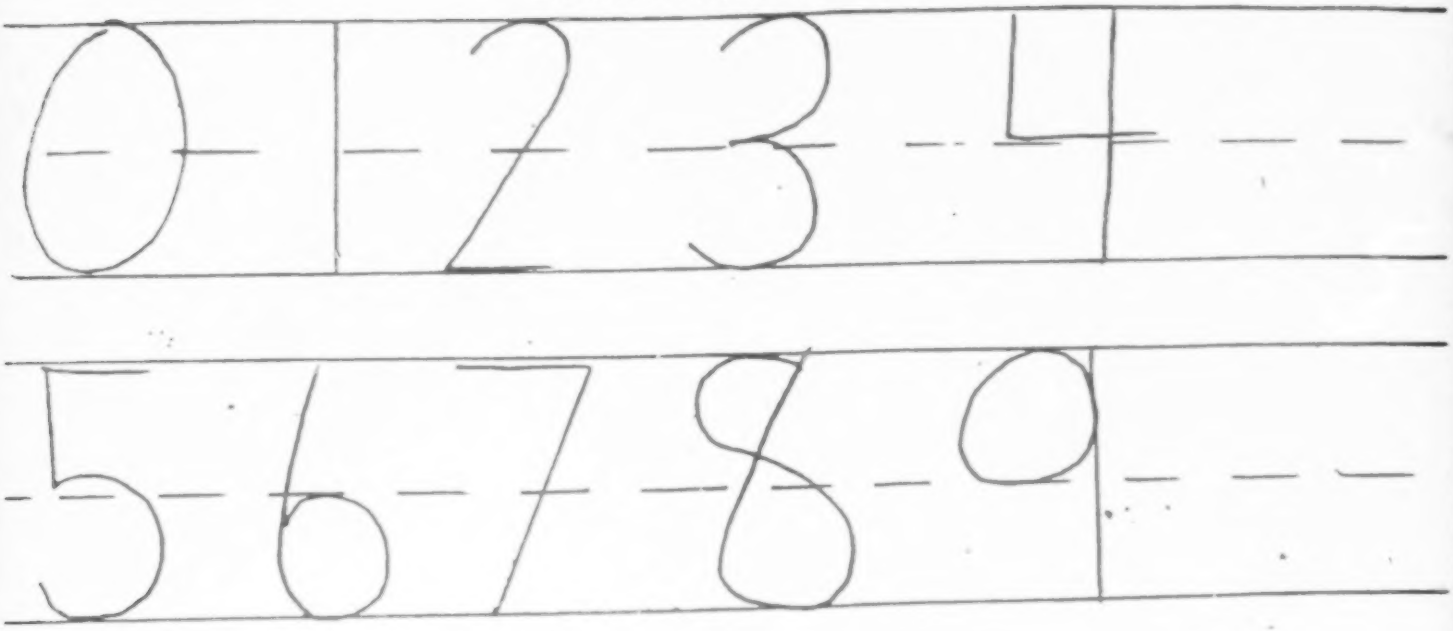


"A" "B" "C" "D" "E"

"m" "s" "w" "y" "z"

APPENDIX H

Handwriting Activity Test



"0" "1" "2" "3" "4"

"5" "6" "7" "8" "9"

APPENDIX I

Weekly Student Checklist

Student	Week One	Week Two	Week Three	Week Four	Week Five	Week Six	Week Seven	Week Eight	Week Nine	Week Ten
Shikura B.										
Dwight B.										
Jason C.										
Daniel C.										
Matthew E.										
Dwight H.										
Vicky M.										
Aaron D.										
Brian S.										
Brandon W.										

APPENDIX J

Fine Motor Skills Screening Posttest

TRACING

Task -

1. can the student trace over lines? yes-no
2. can the student trace forms? yes-no
3. can the student trace directional arrows? yes-no
4. can the student trace letters, numbers? yes-no

Cutting

Task >

1. Can the student cut along straight lines? yes-no
2. Can the student cut shapes? yes-no
3. Can the student cut pictures? yes-no

Clay

Task -

1. can the student mold shapes? yes-no
2. can the student mold letters? yes-no

Primary Games

Task-

1. can the student manipulate peg boards? yes-no
2. can the student hammer nails? yes-no
3. can the student play jacks? yes-no
4. can the student clip clothespins? yes-no

Lacing

Task-

1. can the student lace sewing cards? yes-no

Weaving

Task-

1. can the student weave a designs on weaving mats? yes-no

Handwriting

Task-

1. Can the student write upper case, lower case letters? yes-no
2. Can the student write numbers 0-20? yes-n
3. Can the student write own first name? yes-

APPENDIX K

Fine Motor Skills Mastery Checklist

Student	Tracing	Cut & Paste	Clay	Primary Games	Lacing	Weaving	Handwriting, Letters	Handwriting, Numbers
	Pre	Pre	Pre	Pre	Pre	Pre	Pre	Pre
	Post	Post	Post	Post	Post	Post	Post	Post
Shikura B.								
Dwight D.								
Jason C.								
Daniel C.								
Matthew E.								
Dwight H.								
Vicky M.								
Aaron D.								
Brian S.								
Brandon W.								

APPENDIX L

Cooperative Preschool Inventory Item Analysis

Student	Pretest	Percent of mastery	Posttest	Percent of mastery	Mastery increase
Skikura B.	1/4	25%	3/4	75%	+50%
Dwight D.	1/4	25%	2/4	50%	+25%
Jason C.	2/4	50%	4/4	100%	+50%
Daniel C.	3/4	75%	4/4	100%	+50%
Matthew E.	1/4	25%	4/4	100%	+75%
Dwight H.	2/4	50%	4/4	100%	+50%
Vicky M.	1/4	25%	3/4	75%	+50%
Aaron D.	1/4	25%	2/4	50%	+25%
Brian S.	2/4	50%	4/4	100%	+50%
Brandon W.	1/4	25%	4/4	100%	+75%

no. of test items mastered / Total no. of test items

Teacher Designed Test Item Analysis

Student	Pretest	Percent of mastery	Posttest	Percent of mastery	Mastery increase
Skikura B.	7/22	31%	17/22	77%	+46%
Dwight D.	8/22	36%	15/22	68%	+32%
Jason C.	15/22	68%	22/22	100%	+32%
Daniel C.	14/22	63%	22/22	100%	+37%
Matthew E.	10/22	45%	19/22	86%	+41%
Dwight H.	15/22	68%	22/22	100%	+32%
Vicky M.	10/22	45%	20/22	90%	+45%
Aaron D.	7/22	31%	15/22	68%	+37%
Brian S.	12/22	54%	22/22	100%	+46%
Brandon W.	12/22	54%	22/22	100%	+46%